Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1.   (Canceled)

2.   (Currently Amended) The method of claim ~~21~~36, wherein the <u>hand</u> and fingering <u>positioning</u> information is comprised of which finger is placed where on the ~~at least one~~ musical instrument.

3.   (Canceled)

4.   (Currently Amended) The method of claim ~~21~~36, wherein the <u>hand</u> and fingering <u>positioning</u> information is ~~optimum fingering~~ such that hand movement is minimized on the <u>musical</u> instrument ~~for~~ <u>when</u> performing the musical composition.

5.   (Currently Amended) The method of claim ~~21~~36, wherein the <u>hand</u> and fingering <u>positioning</u> information is ~~alternate fingering~~ such that the musical composition is easier to perform on the instrument for the skill level of a given performer.

6.   (Currently Amended) The method of claim ~~21~~36, wherein the <u>hand</u> and fingering <u>positioning</u> information is ~~alternate fingering~~ such that it provides for a preferred tonal stylization for a given performer or composer.

7.   (Currently Amended) The method of claim ~~21~~36, wherein the input musical composition is comprised of a musical score or tablature information.

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8.   (Canceled)

9.   (Currently Amended) The method of claim 2136, wherein the input means device is selected from the group consisting of a data storage device containing digital musical data, a computer network from which digital musical data are obtained, a computer program where digital musical data are entered by a mouse, keyboard, or tablet, a MIDI device providing digital musical data, a digitizing scanner that scans paper containing the musical composition and a means of converting the digitized image into digital musical data, a microphone that captures musical sounds and a converter that converts the sounds into digital musical data.

10 – 14 (Canceled)

15.   (Currently Amended) The method of claim 2136, wherein the output means device is selected from the group consisting of a data storage device, a computer network, a printer, a computer monitor, and a device that uses the hand and fingering information for a musical performance.

16 -23 (Canceled)

24.   (New) A computing system for automatically determining hand and fingering positioning information for performing a musical composition on a musical instrument, comprising:

    a.   a memory,

    b.   an input device for inputting the musical composition into the computing system,

    c.   a processor for automatically (i) identifying all strokes and stroke groups in the input musical composition, wherein a stroke is a note or a chord, and wherein a stroke group comprises sequential strokes of the musical

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composition that can be played at one positional location on the musical instrument, (ii) selecting a stroke group to be used to determine the hand and fingering information for each stroke, wherein each selection is based on the shortest path of hand and fingering movement between sequential strokes, and (iii) using the selected stroke groups to determine the hand and fingering positioning information for playing the strokes in the musical composition on the musical instrument, and

e.   an output device for outputting the hand and fingering positioning information for performance of the musical composition on the musical instrument.

25.   (New) The computing system of claim 24, wherein the hand and fingering positioning information comprises an array of hand position information selected from the group consisting of which hand is being described, which finger is placed where on the musical instrument, and to which stroke in the musical composition the information refers.

26.   (New) The computing system of claim 25, wherein the hand and fingering positioning information is for a string instrument.

27.   (New) The computing system of claim 26, wherein the string instrument is a guitar and the hand and fingering positioning information indicates which finger is on which string and fret of the guitar.

28.   (New) The computing system of claim 25, wherein the hand and fingering positioning information is for a keyboard instrument.

29.   (New) The computing system of claim 28, wherein the keyboard instrument is a piano and the hand and fingering positioning information indicates which finger of which hand is on which key of the piano.

30.   (New) The computing system of claim 24, wherein the hand and fingering positioning information is such that hand movement is minimized on the musical instrument when performing the musical composition.

31.   (New) The computing system of claim 24, wherein the hand and fingering positioning information is such that the musical composition is easier to perform on the instrument for the skill level of a given performer.

32.   (New) The computing system of claim 24, wherein the hand and fingering positioning information is such that it provides for a preferred tonal stylization for a given performer or composer.

33.   (New) The computing system of claim 24, wherein the input device is selected from the group consisting of a data storage device containing digital musical data, a computer network from which digital musical data are obtained, a computer program where digital musical data are entered by a mouse, keyboard, or tablet, a MIDI device providing digital musical data, a digitizing scanner that scans paper containing the musical composition and a means of converting the digitized image into digital musical data, a microphone that captures musical sounds and a converter that converts the sounds into digital musical data.

34.   (New) The computing system of claim 24, wherein the output device is selected from the group consisting of a data storage device, a computer network, a printer, a computer monitor, and a device that uses the hand and fingering information for a musical performance.

35.   (New) The computing system of claim 24, wherein the computing system comprises a digitizing device for digitizing a musical composition that is input in a non-digitized form.

36.   (New) A method for automatically determining hand and fingering positional information for performing a musical composition on a musical instrument, comprising:

    a.   providing a computing system,

    b.   inputting the musical composition into the computing system,

    c.   using the computing system to automatically (i) identify all strokes and stroke groups in the input musical composition, wherein a stroke is a note or a chord, and wherein a stroke group comprises sequential strokes of the musical composition that can be played at one positional location on the musical instrument, (ii) select a stroke group to be used to determine the hand and fingering information for each stroke, wherein each selection is based on the shortest path of hand and fingering movement between sequential strokes, and (iii) use the selected stroke groups to determine the hand and fingering positioning information for playing the strokes in the musical composition on the musical instrument, and

    d.   outputting the hand and fingering positioning information for performance of the musical composition on the musical instrument.

37.   (New) The method of claim 36, wherein the method outputs hand and fingering positional information for performing a musical composition on a keyboard instrument or a string instrument.

38.   (New) The method of claim 37, wherein the instrument is a piano or a guitar.

39.   (New) A computing system for automatically determining hand and fingering positioning information for performing a musical composition on a musical instrument, comprising:

    a.   a memory,

    b.   an input device for inputting the musical composition into the computing system,

c.   a processor for automatically (i) identifying all strokes and stroke groups in the input musical composition, wherein a stroke is a note or a chord, and wherein a stroke group comprises sequential strokes of the musical composition that can be played at one positional location on the musical instrument, (ii) selecting a stroke group to be used to determine the hand and fingering information for each stroke, wherein each selection is consistent with a user preference selected from the group consisting of easier fingering, minimized hand movement, ease of performance, and tonal quality, and (iii) using the selected stroke groups to determine the hand and fingering positioning information for playing the strokes in the musical composition on the musical instrument in the user preferred manner, and

e.   an output device for outputting the hand and fingering positioning information for performance of the musical composition on the musical instrument according to the user preference.